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10/637,609	08/11/2003	Satoru Tanigawa	2003_1128A	2469

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Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _____ MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *12 August 2003*.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☐ Claim(s) _____ is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-34* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☒ All   b)☐ Some * c)☐ None of:

      1.☒ Certified copies of the priority documents have been received.

      2.☒ Certified copies of the priority documents have been received in Application No. *10/637,609*.

      3.☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date *21 December 2005*.

4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: _____ .

DETAILED ACTION

Specification

5   The abstract of the disclosure is objected to because:

- page 27, line 25 "...the write address S112. The..." makes improper reference to

  element S102 in figures 1 and 4. Examiner asserts applicant was referring to the

  write address S102 and not S112.

- page 34, lines 23-24 "...when the write address counter 102 is..." makes

10   improper reference to element 102 in figures 1 and 4. Examiner asserts applicant

  was referring to the write address counter 101 and not 102.

Correction is required. See MPEP § 608.01(b).

15   *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
> section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are
20 > such that the subject matter as a whole would have been obvious at the time the invention was made to a person
> having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the
> manner in which the invention was made.

Claims 1-5, 6-8 and 15-26 are rejected under 35 U.S.C. 103(a) as being unpatentable

over Okayama et al. (U.S. Patent No. 5,045,939) in view of Takabatake et al. (U.S. Patent No.

6,320,909 B1) and Stam et al. (U.S. Patent No. 6,631,316 B2).

As to **claims 1-5** which are all rejected for containing similar data, Okayama et al

discloses a clock conversion apparatus for converting display data synchronized with a first

clock (22) into data synchronized with a second clock (23), said apparatus comprising:

- a memory (25) for storage being able to execute a writing operation and a reading

  operation independently from each other using a clock for writing (22) and a clock for

  reading (23), respectively (Okayama discloses writing and reading operations handled

  independently from each other using their own clocks and counters to carry out

  addressing of and reading of said data; column 3, lines 30-35 and column 3, lines 54-57);

- a first counter (27) for starting count of the first clock on receipt of a writing start

  reference signal (receiving the first clock signal when the horizontal sync signal is

  delivered) indicating a reference timing of starting data writing into the memory and

  generating write addresses (column 3, lines 17-22 and column 3, lines 30-35) of the

  memory so that the write addresses repeat increase or decrease (counts up in response to

  the first clock signal) within a predetermined range of addresses of the memory

  (Okayama discloses extracting data from wide screen picture data stored in memory 25

  therefore knowing the size of the image captured before storage; column 3, lines 10-16),

  thereby enabling writing of the data corresponding to the predetermined period into the

  memory over plural times (column 3, lines 36-53);

- a second counter (28) for starting count of the second clock from a reading start reference signal (receiving the first clock signal when the horizontal sync signal is delivered) indicating a reference timing of starting data reading from the memory and generating read addresses (column 3, lines 17-22; column 3, lines 36-39; column 3, lines 54-57) of

5   the memory so that the read addresses repeat increase or decrease (counts up from the start address) within a predetermined range of addresses of the memory (Okayama discloses being aware of the number of data to be extracted for normal screen size of the starting of the reading process; column 3, line 57 thru column 4, line 3), thereby enabling reading of the data corresponding to the predetermined period, which have been written

10   in the memory, over plural times (column 3, lines 36-53).

Okayama et al does not disclose a delay adjustment circuit capable of adjusting a delay time, which delays the writing start reference signal to generate the reading start reference signal.

Takabatake et al teaches a picture decoding and display unit that contains a delay circuit (60) that is coupled to control unit (14) that enables address generator (54) which generates read

15   addresses from memory banks (32, 34, 36) that is delayed from starting decoding of the data upon reception of a synchronization signal (column 16, lines 22-45 and column 17, line 60 thru column 1, line 16).

It would have been obvious to one of ordinary skill of the art, having the teachings of Okayama et al and Takabatake et al before him at the time the invention was made, to modify

20   address writing and reading scheme disclosed by Okayama to use the delay circuit as taught by Takabatake et al wherein the reading address creation process is delayed upon the reception of a synchronization signal.

One of ordinary skill in the art would be motivated to make use of the delay circuit in

view of the teachings of Takabatake et al, as doing so would give the added benefit of supporting

different types of image data (column 7, lines 1-23).

5   Though they both contain memory, neither Okayama et al nor Takabatake et al teach a

memory having addresses less than addresses required for storage of data corresponding to a

predetermined period. Also, Okayama et al and Takabatake et al do not teach and the last address

created for every predetermined period is carried out within a range of addresses narrower than

the predetermined range of addresses.

10   Stam et al teaches an image processing system for storing image data with less available

memory than is needed to store all pixel data (column 2, lines 18-23). Stam et al also teaches

discarding some of the image data collected to accommodate the reduced memory available

thereby narrowing the address range (column 8, lines 44-61).

It would have been obvious to one of ordinary skill of the art, having the teachings of

15   Okayama et al, Takabatake et al and Stam et al before him at the time the invention was made, to

modify memory disclosed by Okayama et al and Takabatake et al to use memory as taught by

Stam et al wherein there is less available memory than is needed to store all data.

One of ordinary skill in the art would be motivated to make use of the memory in view of

the teachings of Stam et al, as doing so would give the added benefit of containing a filter

20   algorithm to better process image data (column 2, lines 30-37).

As to **claim 6 and 15-18**, Okayama discloses an apparatus wherein

- the data corresponding to the predetermined period are written in the memory (25) using write addresses (WA produced by the clock 22 and the counter 27) sampled at the first clock (22) within the predetermined period (column 3, lines 17-22 and column 3, lines 30-53); and

5
- the data are read from the memory (25) using read addresses (RA produced by clock 23 and counter 28) sampled at the second clock (column 3, lines 17-22 and column 3, lines 30-57).

Okayama et al does not disclose addressing such that a multiple of a minimum write address value becomes close to the number of samples of data and that a multiple of a maximum

10   read address value becomes close to the number of samples of data.

Stam et al teaches discarding some picture data if memory size is inadequate to accommodate storage (column 8, lines 44-61). Also, Sham et al teaches saving picture data with the knowledge of minimum and maximum range data available to better and the ability to adjust row and column numbers as needed to accommodate image data (column 9, line 32 thru column

15   10, line 8).

As to **claim 7 and 19-22**, Okayama discloses an apparatus wherein

- the data corresponding to the predetermined period are written in the memory (25) using write addresses (WA produced by the clock 22 and the counter 27) sampled at the first

20   clock (22) within the predetermined period (column 3, lines 17-22 and column 3, lines 30-53); and

• the data are read from the memory (25) using read addresses (RA produced by clock 23

and counter 28) of the write addresses (with use of the start address SA generator 29;

column 3, lines 17-22 and column 3, lines 30-57).

Okayama et al does not disclose addressing such that a multiple of a minimum write

5   address value becomes close to the number of samples of data and the read addresses have a

maximum value equal to the maximum value of the write addresses.

Stam et al teaches discarding some picture data if memory size is inadequate to

accommodate storage (column 8, lines 44-61).

Takabatake et al teaches the read addresses have a maximum value equal to the

10   maximum value of the write addresses (column 7, lines 11-23).

As to **claim 8 and 23-26**, Okayama discloses an apparatus wherein:

• the predetermined period is one horizontal sync period (column 3, lines 17-35).

15

Claims 9 and 27-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Okayama et al. (U.S. Patent No. 5,045,939), Takabatake et al. (U.S. Patent No. 6,320,909 B1)

and Stam et al. (U.S. Patent No. 6,631,316 B2) as applied to claim 1 above, and further in view

of Maze (U.S. Patent No. 4,573,080).

20   As to **claim 9 and 27-30**, Okayama discloses an apparatus wherein

• the first counter circuit (27) comprises:

      o   a write address counter (27) for counting the first clock to create the write

addresses (column 3, lines 30-35).

Okayama does not disclose a write maximum value limiter for comparing the write

address outputted from the write address counter with a settable write maximum value, and

5   resetting the write address counter when the write address becomes equal to the write maximum

value.

Maze teaches a television receiver with an adaptive memory addressing comprising a

memory (24) for storing image data and write address generating circuitry. The write address

generating circuitry comprises address comparator circuit (208) for comparing the write address

10   outputted from a write address counter (202) with a settable write maximum value (highest

address level), and resetting the write address counter (202) when the write address becomes

equal to the write maximum value (column 6, lines 3-34).

It would have been obvious to one of ordinary skill of the art, having the teachings of

Okayama et al, Takabatake et al, Stam et al and Maze before him at the time the invention was

15   made, to modify write counter circuit disclosed by Okayama et al to use the write address

generation scheme as taught by Maze wherein writing of data is halted once a maximum write

address limit is obtained.

One of ordinary skill in the art would be motivated to make use of the write address

generation in view of the teachings of Maze, as doing so would give the added benefit of

20   supporting a progressively scanned image data (column 1, line 55 thru column 2, line 3).

Claims 10 and 31-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Okayama et al. (U.S. Patent No. 5,045,939), Takabatake et al. (U.S. Patent No. 6,320,909 B1) and Stam et al. (U.S. Patent No. 6,631,316 B2) as applied to claim 1 above, and further in view of Eglit (U.S. Patent No. 6,054,980).

5   As to **claim 10 and 31-34**, Okayama discloses an apparatus wherein

- the second counter circuit (28) comprises:

     o   read address counter (28) for counting the second clock to create the read
          addresses (column 3, lines 36-39 and column 3, lines 54-57).

Okayama does not disclose a read maximum value limiter for comparing the read

10   address outputted from the read address counter with a settable read maximum value, and

resetting the read address counter when the read address becomes equal to the read maximum

value.

Eglit teaches a display unit comprising a memory (560) for storing image data and

addressing control circuitry (390). The addressing control circuitry (390) comprises read address

15   comparator circuit (450) for comparing the last read address outputted from a read address

counter (440) with a highest read address level, and resetting the read address counter (440)

when the read address becomes equal to the read maximum value (column 9, lines 8-15).

It would have been obvious to one of ordinary skill of the art, having the teachings of

Okayama et al, Takabatake et al, Stam et al and Eglit before him at the time the invention was

20   made, to modify read counter circuit disclosed by Okayama et al to use the read address

generation scheme as taught by Eglit wherein reading of data is halted once a maximum read

address limit is obtained.

One of ordinary skill in the art would be motivated to make use of the read address

generation in view of the teachings of Eglit, as doing so would give the added benefit of frame

rate compression without requiring excessive memory (column 2, lines 38-44).

5

Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Okayama et al.

(U.S. Patent No. 5,045,939) and Stam et al. (U.S. Patent No. 6,631,316 B2).

As to **claim 11**, Okayama et al discloses a clock conversion method for converting data

synchronized with a first clock (22) into data synchronized with a second clock (23), said method

10   comprising:

- generating write addresses on the basis of the first clock (22) so that data corresponding

  to a predetermined period (as determined by write rate of data 17.6 MHz; column 3, lines

  40-53) are written over plural times into a memory (25), and is able to execute a writing

  operation and a reading operation independently from each other using a clock for

15   writing and a clock for reading (Okayama discloses writing and reading operations

  handled independently from each other using their own clocks and counters to carry out

  addressing of and reading of said data; column 3, lines 30-57), respectively; and

- generating read addresses on the basis of the second clock (23) so that the data

  corresponding to the predetermined period (as determined by read rate of data 14.3 MHz;

20   column 3, lines 40-53) are read from the memory (25) over plural times (column 3, lines

  30-57).

Okayama et al does not disclose a memory having addresses less than addresses required for storage of data corresponding to a predetermined period.

Stam et al teaches an image processing system for storing image data with less available memory than is needed to store all pixel data (column 2, lines 18-23).

5   It would have been obvious to one of ordinary skill of the art, having the teachings of Okayama et al and Stam et al before him at the time the invention was made, to modify memory disclosed by Okayama et al to use memory as taught by Stam et al wherein there is less available memory than is needed to store all data.

One of ordinary skill in the art would be motivated to make use of the memory in view of

10   the teachings of Stam et al, as doing so would give the added benefit of containing a filter algorithm (column 2, lines 30-37).

Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Masuda et al.

15   (U.S. Patent No. 6,791,623 B1) and Stam et al. (U.S. Patent No. 6,631,316 B2).

As to **claim 12**, Masuda et al discloses a video display apparatus (image display system) comprising:

- a first video processing unit (2) for subjecting a digital video signal (NTSC data) to first video processing (2) on the basis of a first clock (data coming in from A/D converter 42

20   are controlled in sync with the horizontal synchronization signal and write clock generator circuit [first clock] 416 via write control circuit; column 14, line 33 thru column 15, line 11 and column 18, line 58 thru column 19, line 20);

- a clock conversion unit (frequency resolution conversion unit 4) for converting the digital

    video signal which is outputted from the first video processing unit (2) and synchronized

    with the first clock (416) into a digital video signal synchronized with a second clock

    (read clock generator circuit 417; column 14, line 33 thru column 15, line 11 and column

5   18, line 58 thru column 19, line 20);

- a second video processing unit (5) for subjecting the digital video signal outputted from

    the clock conversion unit (4) to second video processing (5) on the basis of the second

    clock (read clock generator circuit 417 via read control circuit 410; column 14, lines 42-

    56 and column 18, line 58 thru column 19, line 20);

10   - a display device (7) for displaying the digital video signal outputted from the second

    video processing unit (column 14, lines 42-56); and

- said clock conversion unit comprising:

    o   a memory (412 and 418) able to execute a writing operation and a reading

        operation independently from each other using a clock for writing and a clock

15   (416) for reading (417), (column 18, line 65 thru column 19, line 8) respectively;

        and

    o   a memory controller (49 and 410) for controlling the memory so that the digital

        video signal outputted from the first video processing unit are written into the

        memory over plural times for every horizontal line, and the data corresponding to

20   each horizontal line, which are written in the memory, can be read over plural

        times (Masuda discloses writing and reading operations wherein both are carried

out repetitively until all subsequent lines of video data are read; column 16, lines

1-53).

Masuda does not disclose memory having a capacity less than one horizontal line of the

digital video signal outputted from the first video processing unit.

5   Stam et al teaches an image processing system for storing image data with less available

memory than is needed to store all pixel data (column 2, lines 18-23).

It would have been obvious to one of ordinary skill of the art, having the teachings of

Masuda et al and Stam et al before him at the time the invention was made, to modify memory

disclosed by Masuda et al to use memory as taught by Stam et al wherein there is one less

10   horizontal line of available memory than is needed coming from a video processing unit.

One of ordinary skill in the art would be motivated to make use of the memory in view of

the teachings of Stam et al, as doing so would give the added benefit of containing a filter

algorithm to better process image data (column 2, lines 30-37).

15

Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Masuda et al.

(U.S. Patent No. 6,791,623 B1) and Stam et al. (U.S. Patent No. 6,631,316 B2) as applied to

claim 12 above, and further in view of Okayama et al. (U.S. Patent No. 5,045,939).

As to **claim 13**, Masuda et al discloses a video display apparatus with a memory

20   controller (49 and 410).

Masuda does not disclose said memory controller comprising a first counter circuit for

starting count of the first clock on receipt of a writing start reference signal indicating a reference

timing of starting data writing into the memory, and generating write addresses of the memory so

that the one horizontal line of data can be written into the memory over plural times; and a

second counter circuit for starting count of the second clock from a reading start reference signal

indicating a reference timing of starting data reading from the memory, and generating read

5   addresses of the memory so that the one horizontal line of data which are written in the memory

can be read over plural times.

Okayama teaches a television screen converter comprising memory addressing circuitry

comprising a memory (25), a write clock generator (22), a read clock generator (23), a write

address counter (27), a read start address generator (29) and a read address counter (28). The

10   write counter circuit (27) starts counting on receipt of a writing start reference signal (horizontal

sync signal from sync separator 21) indicating a reference timing of starting data writing into the

memory, and generating write addresses of the memory so that the one horizontal line of data

can be written into the memory over plural times (column 3, lines 1-60). The read counter circuit

(28) for start counting from a reading start reference signal (from read start address generator 29)

15   indicating a reference timing of starting data reading from the memory, and generating read

addresses of the memory so that the one horizontal line of data which are written in the memory

can be read over plural times (column 3, lines 1-60).

It would have been obvious to one of ordinary skill of the art, having the teachings of

Masuda et al, Stam et al and Okayama et al before him at the time the invention was made, to

20   modify memory controllers disclosed by Masuda et al to use memory addressing circuitry as

taught by Okayama et al.

One of ordinary skill in the art would be motivated to make use of the memory

addressing circuitry in view of the teachings of Okayama et al, as doing so would give the added

benefit of wide screen to normal screen conversion (column 2, lines 11-17).

5

Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Masuda et al.

(U.S. Patent No. 6,791,623 B1) in view of Stam et al. (U.S. Patent No. 6,631,316 B2), Okayama

et al. (U.S. Patent No. 5,045,939) and Worrell et al (U.S. Patent No. 6,633,344 B1).

As to **claim 14**, Masuda et al discloses a memory address setting method for a video

10   display apparatus comprising:

- a first video processing unit (2) for subjecting a digital video signal (NTSC data) to

  first video processing on the basis of a first clock (data coming in from A/D converter

  42 are controlled in sync with the horizontal synchronization signal and write clock

  generator circuit [first clock] 416 via write control circuit; column 14, line 33 thru

15   column 15, line 11 and column 18, line 58 thru column 19, line 20);

- a clock conversion unit (frequency resolution conversion unit 4) for converting the

  digital video signal which is outputted from the first video processing unit (2) and

  synchronized with the first clock (416) into a digital video signal synchronized with a

  second clock (read clock generator circuit 417; column 14, line 33 thru column 15,

20   line 11 and column 18, line 58 thru column 19, line 20);

- a second video processing unit (5) for subjecting the digital video signal outputted

  from the clock conversion unit (4) to second video processing (5) on the basis of the

second clock (read clock generator circuit 417 via read control circuit 410; column

14, lines 42-56 and column 18, line 58 thru column 19, line 20);

- a display device (7) for displaying the digital video signal outputted from the second

video processing unit (column 14, lines 42-56); and

5   - said clock conversion unit (frequency resolution conversion unit 4) comprising:

o   a memory (412 and 418) able to execute a writing operation and a reading

operation independently from each other using a clock for writing and a clock

(416) for reading (417), (column 18, line 65 thru column 19, line 8).

Masuda does not disclose memory having a capacity less than one horizontal line of the

10   digital video signal outputted from the first video processing unit.

Stam et al teaches an image processing system for storing image data with less available

memory than is needed to store all pixel data (column 2, lines 18-23).

It would have been obvious to one of ordinary skill of the art, having the teachings of

Masuda et al and Stam et al before him at the time the invention was made, to modify memory

15   disclosed by Masuda et al to use memory as taught by Stam et al wherein there is one less

horizontal line of available memory than is needed coming from a video processing unit.

One of ordinary skill in the art would be motivated to make use of the memory in view of

the teachings of Stam et al, as doing so would give the added benefit of containing a filter

algorithm to better process image data (column 2, lines 30-37).

20

Masuda et al and Stam et al do not teach said clock conversion unit comprising a first

counter circuit for generating write addresses of the memory on the basis of the first clock so that

the data corresponding to the predetermined period are written over plural times and a second

counter circuit for generating read addresses of the memory on the basis of the second clock so

that the data corresponding to the predetermined period are from the memory over plural times.

Okayama teaches a television screen converter comprising memory addressing circuitry

5   comprising a memory (25), a write clock generator (22), a read clock generator (23), a write

address counter (27), a read start address generator (29) and a read address counter (28). The

write counter circuit (27) starts counting on receipt of a writing start reference signal (horizontal

sync signal from sync separator 21) indicating a reference timing of starting data writing into the

memory, and generating write addresses of the memory so that the one horizontal line of data

10   can be written into the memory over plural times (column 3, lines 1-60). The read counter circuit

(28) for start counting from a reading start reference signal (from read start address generator 29)

indicating a reference timing of starting data reading from the memory, and generating read

addresses of the memory so that the one horizontal line of data which are written in the memory

can be read over plural times (column 3, lines 1-60).

15   It would have been obvious to one of ordinary skill of the art, having the teachings of

Masuda et al, Stam et al and Okayama et al before him at the time the invention was made, to

modify memory controllers disclosed by Masuda et al to use memory addressing circuitry as

taught by Okayama et al.

One of ordinary skill in the art would be motivated to make use of the memory

20   addressing circuitry in view of the teachings of Okayama et al, as doing so would give the added

benefit of wide screen to normal screen conversion (column 2, lines 11-17).

Masuda et al, Stam et al and Okayama et al do not teach the memory address setting

method comprising: a step of determining a broadcasting system of the digital video signal

inputted to the first video processing unit, a step of detecting upper limits or lower limits of count

values of the first and second counter circuits corresponding to the determined broadcasting

5   system, according to the broadcasting system or a step of setting the detected upper limits or

lower limits of the count values on the first and second counter circuits.

Worrell et al teaches a memory management process for video digital data that is capable

of detecting/buffering various video format schemes via field type detector (78) found in video

input interface (12); (column 1, lines 25-30 and column 5, lines 25-43). Also, Worrell teaches a

10   method for addressing of video data unique to the format detected that addresses locations in

memory (14) via memory controller (16) and video input interface (12); (column 3, lines 4-41).

In coordination with memory controller (16) and video input interface (12), counter limit values

(L1 and L2) that writes/reads necessary data to/from memory (14)

It would have been obvious to one of ordinary skill of the art, having the teachings of

15   Masuda et al, Stam et al, Okayama et al and Worrell et al before him at the time the invention

was made, to modify memory address setting method taught by Masuda et al, Stam et al and

Okayama et al to use a field type detector circuit as well as the counter limiting detectors as

taught by Worrell et al.

One of ordinary skill in the art would be motivated to make use of the addressing

20   schemes in view of the teachings of Worrell et al, as doing so would give the added benefit of

multiple video format support (column 1, lines 25-30).

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to James Sugent whose telephone number is (571) 272-5726. The

examiner can normally be reached on 8AM - 4PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

5   supervisor, Lynne Browne can be reached on (571) 272-3670. The fax phone number for the

organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent

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